

Docket No. P-6013

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Alarcon et al.

Serial No.:

10/721,797

Art Unit:

3736

Filing Date:

November 26, 2003

Examiner:

Unassigned

For:

Fiber Optic Device For Sensing Analytes

Mail Stop Amendments Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. §1.56, 1.97 and 1.98, Applicants respectfully submit this communication to make of record the documents cited in Form PTO/SB/08A. Form PTO/SB/08A and a copy of each document cited are enclosed herewith.

It is respectfully submitted that the disclosure of the above documents do not constitute an admission that they are relevant or material to the claims or are "prior art" to the subject application. The citation of them is not to be considered as a representation that no better art exists or that a search has been made.

Respectfully submitted,

Dated: June <u>24</u> , 2004

Nanette S. Thomas **Attorney for Applicants** Reg. No. 33,310

ADDRESSED TO: MAIL STOP AMENDMENTS,

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS

BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE

Becton, Dickinson and Company 1 Becton Drive Franklin Lakes, NJ 07417-1880 (201) 847-7049

Customer No.: 26253

COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 ON: JUNE <u>44</u>, 2004.

BY: SUSAN R. WAGNER

Doc. No.: 79469

JUN 2 8 2004

Sheet 1

PTO/SB/08A (04-03) Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE aduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

form 1449/PTO

(Use as many sheets as necessary)

Complete if Known **Application Number** 10/721,797 Filing Date November 26, 2003 First Named Inventor ALARCON, et al. Art Unit 3736 Examiner Name P-6013 Attorney Docket Number

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ^{2 (# known)}			Figures Appear
		^{US-} 20030232383	12/18/2003	DAUNERT, et al.	
		^{US-} 20030153026	08/14/2003	ALARCON, et al.	
		^{US-} 20030134346	07/17/2003	AMISS, et al.	
		^{US-} 20030130569	07/10/2003	RASKAS	
_		^{US-} 20030130167	07/10/2003	PITNER, et al.	
		^{US-} 6535753	03/18/2003	RASKAS	
		^{US-} 6512939	01/28/2003	COLVIN, et al.	
		us- 20020193672	12/19/2002	WALSH, et al.	
		^{US-} 6432723	08/13/2002	PLAXCO, et al.	
		^{US-} 20020058863	05/16/2002	PETERSSON, et al.	
		^{US-} 20020026108	02/28/2002	COLVIN	
		^{US-} 6330464	12/11/2001	COLVIN, et al.	
		^{US-} 6304766	10/16/2001	COLVIN	
		us- 6277627	08/21/2001	HELLINGA	
		us- 6256522	07/03/2001	SCHULTZ	
		^{US-} 6197257	03/06/2001	RASKAS	
		^{US-} 6191847	02/20/2001	MELENDEZ, et al.	
		^{US-} 6157442	12/05/2000	RASKAS	
		^{US-} 6111248	08/29/2000	MELENDEZ, et al.	

	-	FORE	IGN PATENT DOCU	IMENTS		
Examiner Cite Initials* No.	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	Τ ⁶
		WO 3060464	07/24/2003	DAUNERT, et al		
,						
						<u> </u>

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

	Subst	titute for form 1449/F	PTO		Complete if Known		
	0000				Application Number	10/721,797	
	INI	EODM ATI	ON DI	SCLOSURE	Filing Date	November 26, 2003	
					First Named Inventor	ALARCON, et al.	
	ST	TATEMEN	T BY A	APPLICANT	Art Unit	3736	
		(Use as mar	ny sheets as	necessary)	Examiner Name		
$\overline{}$	Sheet	2	Of	4	Attorney Docket Number	P-6013	

			U. S. PATEN	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	<u> </u>	US- 6081736	06/27/2000	COLVIN, et al.	
		^{US-} 6045756	04/04/2000	CARR, et al.	
		us- 6040194	03/21/2000	CHICK, et al.	
		^{US-} 6024923	02/15/2000	MELENDEZ, et al.	
		^{US-} 5946083	08/31/1999	MELENDEZ, et al.	
		^{US-} 5900215	05/04/1999	SEIFERT, et al.	
		^{US-} 5866433	02/02/1999	SCHALKHAMMER, et al.	
		US- 5747349	05/05/1998	VAN DEN ENGH, et al.	
		^{US-} 5700897	12/23/1997	KLAINER, et al.	
		^{US-} 5628310	05/13/1997	RAO, et al.	
		^{US-} 5626134	05/06/1997	ZUCKERMAN	
		^{US-} 5605152	02/25/1997	SLATE, et al.	
		^{US-} 5569911	10/29/1996	TOMLINSON, et al.	
		US- 5552272	09/03/1996	BOGART	
		us- 5496997	03/05/1996	POPE	
		^{US-} 5377676	01/03/1995	VARI, et al.	
		^{US-} 5341805	08/30/1994	STAVRIDI, et al.	
		^{US-} 5219527	06/15/1993	HUI, et al.	
		^{US-} 5154890	10/13/1992	MAUZE, et al.	

		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶
						L

Examiner	Date	
Signature	Considered	0,0

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

PTO/SB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449/PTO Application Number 10/721,797 Filing Date November 26, 2003 INFORMATION DISCLOSURE First Named Inventor ALARCON, et al. STATEMENT BY APPLICANT Art Unit 3736 (Use as many sheets as necessary) **Examiner Name** P-6013 Attorney Docket Number Sheet 3

Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Initials*	No.1	Number-Kind Code ^{2 (# known)}	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
		^{US-} 5143066	09/01/1992	KOMIVES, et al.	
		^{US-} 5001054	03/19/1991	WAGNER	
		^{US-} 4981779	01/01/1991	WAGNER	
		^{US-} 4925268	05/15/1990	IYER, et al.	
		^{US-} 4907857	03/13/1990	GIULIANI, et al.	
		^{US-} 4548907	10/22/1985	SEITZ, et al.	
		US-			
		ÚS-			
		US-	 		

		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ^{3 -} Number ^{4 -} Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶
<u>-</u>						
			_			┝

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¹ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (04-03)

Approved for use through 04/30/2003. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE a collection of information unless it contains a valid OMB control number.

Substitut	te for form 1449/PTO			Complete if Known		
Substitu				Application Number	10/721,797	
INF	ORMATION	DIS	CLOSURE	Filing Date	November 26, 2003	
STA	STATEMENT BY APPLICANT		First Named Inventor	ALARCON, et al.		
	(lice or many cho	ote ac n	ococcand	Art Unit	3736	
	(Use as many sheets as necessary)			Examiner Name		
Sheet	4	of	4	Attorney Docket Number	P-6013	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		BALLERSTADT, et al., (1997) Competitive-Binding Assay Method Based On Fluorescence Quenching Of Ligands Held In Close Proximity By A Multivalent Receptor. Anal. Chim. Acta 345:203-12.	
		BLAIR, et al., (1994) Fiber Optic Sensor for Ca2+ Based on an Induced Change in the Conformation of the Protein Calmodulin. Anal Chem., 66:300-2.	
		DE LORIMIER, et al., (2002) Construction Of A Fluorescent Biosensor Family. Protein Sci. 11:2655-75.	
		GILARDI, et al., Engineering The Maltose Binding Protein For Reagentless Fluorescence Sensing (1994) Anal. Chem., 66:3840-47.	
		HELLINGA, et al., (1998) Protein Engineering And The Development Of Generic Biosensors. Trends Biotechnol. 16:183-89.	
		RUSSELL, et al., (1999) A Fluorescence-Based Glucose Biosensor Using Concanavalin A And Dextran Encapsulated In A Poly(Ethylene Glycol) Hydrogel. Anal. Chem. 71:3126-32.	
		SALINS, et al., (2001) A Novel Reagentless Sensing System For Measuring Glucose Based On The Galactose/Glucose-Binding Protein. Anal Biochem. 294:19-26.	
		SHILTON, et al., (1996) Conformational Changes Of Three Periplasmic Receptors For Bacterial Chemotaxis And Transport: The Maltose-, Glucose/Galactose- And Ribose-Binding Proteins. J. Mol. Biol. 264:350-63.	
		TOLOSA, et al., (1999) Glucose Sensor For Low-Cost Lifetime-Based Sensing Using A Genetically Engineered Protein. Anal. Biochem. 267:114-20.	

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

Examiner: Initial in reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation in the informance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.